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2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 June 2001_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _27 June 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _9/04;9/04;12/02_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

Claims 1-5 and **21-24** are rejected under 35 U.S.C. 102(e) as being anticipated

by Smyth et al. (U.S. patent # 6,598,229 B2).

1. As for **Claim 1**, Smyth et al. teach a method for analyzing the operation of a media

delivery device (see col. 2 lines 13-16 "The present invention overcomes the

deficiencies and limitations of the prior art with a system and a method for detecting and

correcting a defective transmission channel in an interactive information distribution

system." The transmission channel is interpreted to be a media delivery device), the

method comprising the steps of:

determining whether a network connection is functional (see col. 10 lines 1-6

"determining whether a given number of channels are not operational for a particular

modulator.");

determining whether a first diagnostic agent is functional, in response to a

determination that the network connection is functional (see Fig. 4, col. 12 lines 12-26

"Referring now to FIG. 4, a first embodiment of the method for detecting a defective

channel and correcting the defective channel is shown . . .Next in step 406, the session

control manager 200 determines the particular DVM that is servicing the channel

identified to be defective." When a network connection is known to be functional, the

DVM is tested to determine if the DVM is defective. The DVM is interpreted to be a

diagnostic agent);

causing the first diagnostic agent to collect diagnostic data associated with the

media delivery device, in response to a determination that the first diagnostic agent is

functional (see Fig. 4 and col. 9 lines 37-58 "The defective channel module 312

monitors the communication between the DVMs 112 and the STBs 116. In particular,

the defective channel module 312 receives, tracks and interprets error signals sent by

the STBs 166 back through the CCMs 118 via the VME bus 152 to the session control

manager 200. The defective channel module 312 processes error signals received from

the STBs 116 and determines whether a particular channel being used by the DVMs

112 to transmit content has a level of service that makes it "defective" or not

operational."); and

analyzing the diagnostic data to determine an operational problem associated

with the media delivery device (see col. 9 lines 37-58 "The defective channel module

312 monitors the communication between the DVMs 112 and the STBs 116. In

particular, the defective channel module 312 receives, tracks and interprets error

signals sent by the STBs 166 back through the CCMs 118 via the VME bus 152 to the

session control manager 200. The defective channel module 312 processes error

signals received from the STBs 116 and determines whether a particular channel being

used by the DVMs 112 to transmit content has a level of service that makes it

"defective" or not operational.").

2. As for **Claim 2**, Smyth et al. teach uploading the first diagnostic agent to the media

delivery device over an alternative network connection, in response to a determination

that the network connection is not functional (see col. 10 lines 10-15 "Once the

defective channel module 312 determines that a channel is defective, the defective

channel module 312 signals the channel re-allocation module 314 so that the data

streams being transmitted over the defective channel can be re-assigned to other

channels communicating with the same node 156.").

3. As for **Claim 3**, Smyth et al. teach uploading a second diagnostic agent to the media

delivery device, in response to a determination that the first diagnostic agent is not

functional (see col. 12 lines 29-41 "Next in step 406, the session control manager 200

determines the particular DVM that is servicing the channel identified to be defective.

This can be done using configuration information and session structures 308 maintained

by the session control manager 200. Next in step 408, the method determines if there

are other modulators not currently in use that are available to transmit the data streams

currently being transmitted over the defective channel. If so the process continues in

step 410 by re-assigning the data streams to use another channel or another DVM 112."

When the DVM, which is interpreted to be a diagnostic agent, is found to be defective,

an alternative DVM is used).

4. As for **Claim 4**, Smyth et al. teach remedying the operational problem (see col. 12

lines 29-41 "Next in step 406, the session control manager 200 determines the

particular DVM that is servicing the channel identified to be defective. This can be done

using configuration information and session structures 308 maintained by the session

control manager 200. Next in step 408, the method determines if there are other

modulators not currently in use that are available to transmit the data streams currently

being transmitted over the defective channel. If so the process continues in step 410 by

re-assigning the data streams to use another channel or another DVM 112.).

5. As for **Claim 5**, Smyth et al. teach uploading a second diagnostic agent to the media

delivery device, in response to a determination that the network connection is not

functional (see col. 12 lines 29-41 "Next in step 406, the session control manager 200

determines the particular DVM that is servicing the channel identified to be defective.

This can be done using configuration information and session structures 308 maintained

by the session control manager 200. Next in step 408, the method determines if there

are other modulators not currently in use that are available to transmit the data streams

currently being transmitted over the defective channel. If so the process continues in

step 410 by re-assigning the data streams to use another channel or another DVM 112.

In the situation where both a DVM and network connection are determined to be non-functional, it is interpreted that a second diagnostic agent (an alternate DVM) is used).

6. As for **Claim 21**, the limitations of Claim 21 fall within the limitations of Claim 1. Claim 21 further requires a computer program product comprising a computer-readable medium having control logic stored therein for causing a computer to analyze the operation of a media delivery device, the control logic comprising computer-readable program code for causing the computer to carry out the limitations. The interactive information distribution system 100 as shown in Fig. 1 with Session Control Manager unit 200, and Resource Manager and Video Server unit 108 as taught by Smyth et al. is interpreted to have a computer program product with a computer readable medium having control logic stored therein for causing a computer to analyze the operation of the media delivery device, wherein the control logic comprises computer-readable program code. See col. 6 line 62 – col. 7 line 7 "In particular, the session control manager 200 forms an interface to the STBs 116 as well as the DVM modules 112 and the control interface (e.g., VME bus 152 in FIG. 1). The session control manager's 200 responsibilities include set top terminal sign-on and time out, authentication, configuration, and control protocol termination; alarm management and frequency assignment; session security; service selection and control; event notification and usage metering; and a subscriber's access to account information. Commands and requests from the set top terminals are processed by the session control manager 200"

7. As for **Claims 22-24**, the limitations of Claims 22-24 fall within the limitations of

Claims 2-4. Claims 22-24 are analyzed and rejected accordingly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims **6-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smyth et al. (U.S. Patent # 6,598,229) in view of Medvinsky (U.S. Patent # 6,754,908).

8. As for **Claim 6**, Smyth et al. teach a diagnostic tool for remotely analyzing and

diagnosing the performance of a media distribution device (see Fig. 1 and col. 2 lines

13-41 "The present invention overcomes the deficiencies and limitations of the prior art

with a system and a method for detecting and correcting a defective transmission

channel in an interactive information distribution system . . . The defective channel

detection module receives signals from the plurality of set top boxes, and based on the

error rate and other factors determines if any of the communication channels used by

the digital video modulators are defective."), comprising:

a data adapter operative to maintain a communication link between the media

distribution device and a media delivery service provider (see Fig. 1 unit 200 Session

Control Manager col. 2 lines 22-41 "the session control manager includes a defective

channel detection module, a channel re-allocation module, and a replacement-signaling

module in addition to other applications and an operating system. The session control

manager is coupled to receive signals from the plurality of set top boxes, and coupled to

control the digital video modulators and the assignment of communication channels to

nodes. The defective channel detection module receives signals from the plurality of

set top boxes, and based on the error rate and other factors determines if any of the

communication channels used by the digital video modulators are defective." The

Session Control manager is interpreted to be a data adaptor operative to maintain a

communication link between a media distribution device (the transmission channel, the

Session Control Manager and Set-top-box are all interpreted to be media distribution

devices) and media delivery service provider (the head-end));

        Smyth et al. do not expressly teach an intelligent diagnostic agent residing in the

media distribution device and operative to collect diagnostic data associated with the

media distribution device. However, in the same field of endeavor, Medvinsky teaches

a system to verify the integrality of a software residing in set-top-box by using a

validation routine that resides in set-top boxes (see Medvinsky col. 2 lines 46-55 "The

present invention validates information, such as software, has not been modified within

a television set top box. In one embodiment, a message is periodically sent to the set

top box that purposefully contains errors. A validation routine in the set top box should

report those errors back to a cable television (TV) provider. However, the validation

routine may not report these errors if it has been modified or replaced by hackers, for

example. Accordingly, the cable TV provider can determine if the security routine is no longer functional by noting the absence of an error report."). In light of the teaching of Medvinsky, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teaching of Smyth et al. to have an intelligent diagnostic agent residing in a media distribution device (wherein the set-top-box is interpreted to be a media distribution device) operative to collect diagnostic data associated with the media distribution device. One of ordinary skill in the art at the time the invention was made would have been motivated to do this in order to verify and validate the system integrity of a set-top-box that may have been tampered with hackers; and

a diagnostic service center operative to communicate with the intelligent diagnostic agent over the communication link to retrieve the diagnostic data and to determine an performance problem associated with the media delivery device (see Smyth et al. col. 2 lines 25-34 "The session control manager is coupled to receive signals from the plurality of set top boxes, and coupled to control the digital video modulators and the assignment of communication channels to nodes. The defective channel detection module receives signals from the plurality of set top boxes, and based on the error rate and other factors determines if any of the communication channels used by the digital video modulators are defective.").

9. As for **Claim 7**, Smyth et al. teach the performance problem is also associated with a second device functionally connected to the media distribution device (see col. 12 lines

29-41 "Next in step 406, the session control manager 200 determines the particular

DVM that is servicing the channel identified to be defective. This can be done using

configuration information and session structures 308 maintained by the session control

manager 200." The DVM is interpreted to be a second device functionally connected to

the media distribution device with the potential source for a performance problem).

10. As for **Claim 8**, the modified Smyth et al. in view of Medvinsky teach the media

distribution device is a set-top box. See Medvinsky col. 2 lines 46-55 "The present

invention validates information, such as software, has not been modified within a

television set top box. In one embodiment, a message is periodically sent to the set top

box that purposefully contains errors. A validation routine in the set top box should

report those errors back to a cable television (TV) provider."

11. As for **Claim 9**, the modified Smyth et al. in view of Medvinsky teaches the

intelligent diagnostic agent is a program module residing in a system memory of the

media distribution device. See Medvinsky col. 4 lines 19-46 "The set top box 108 has

component parts that perform authentication and authorization of objects and

resources. Objects are information such as software, drivers, firmware, data, video, or

audio . . .The set top box 108 includes a block of memory 228 for data and program

storage and program execution. This memory 228 is solid state memory that could

include RAM, ROM, flash, and other types of volatile and non-volatile memory. During

execution, programs are loaded from the memory 228 and use the memory 228 for

scratchpad space. Keys, serial numbers and authorizations can be non-volatilely stored

in flash memory." It is interpreted that the intelligent diagnostic again is a program

module residing in the system memory of the set-top-box.

12. As for **Claim 10**, the modified Smyth et al. in view of Medvinsky teaches the

intelligent diagnostic agent is executable in the system memory. See Medvinsky col. 7

lines 12-17 "The object 408 includes content the system 100 is designed to deliver to

set top boxes 108. Several types of information can be embedded in an object, such as

executable programs, firmware upgrades, run-time programs (e.g., JAVA.RTM. or

ACTIVEX.RTM.)"

13. As for **Claim 11**, the modified Smyth et al. in view of Medvinsky teaches the

diagnostic service center can upload the diagnostic agent to the media distribution

device. See Medvinsky col. 7 lines 49-60 "The process beings in step 604 where the

headend 104 produces authorization and object messages 300, 400 that collectively

include a test signatory group 500 and signature 312. At least one of the test signatory

group 500 and signature 312 intentionally includes an error. The error could be one or

more incorrect bits placed anywhere in the test signatory group 500 or the signature

312. In step 608, the messages 300, 400 are sent to the set top box 108." The

headend is interpreted to be a diagnostic service center that uploads the diagnostic

agent to the set-top-boxes.

14. As for **Claim 12**, the modified Smyth et al. in view of Medvinsky teaches the

diagnostic service center can determine whether the diagnostic agent is functional.

Smyth et al. teach a system wherein the communication network and the digital video

modulators are diagnosed to be functional or not, and when found to be non-functional,

an alternate communication channel or a spare DVM is used. (see Smyth et al. col. 12

lines 12-34 "Referring now to FIG. 4, a first embodiment of the method for detecting a

defective channel and correcting the defective channel is shown. . . Next in step 406,

the session control manager 200 determines the particular DVM that is servicing the

channel identified to be defective . . . If so the process continues in step 410 by re-

assigning the data streams to use another channel or another DVM 112."). It is

interpreted that in the modified Smyth et al. in view of Medvinsky teaching, the

diagnostic center will be able to check if the diagnostic agent that is uploaded to the set-

top-box is function or not and if found that the diagnostic agent by itself is not function,

an alternate diagnostic agent will be uploaded to the set-top-box.

15. As for **Claim 13**, the modified Smyth et al. in view of Medvinsky teaches the

diagnostic service center can replace the diagnostic agent with a substitute diagnostic

agent, in response to a determination that the diagnostic agent is not functional. Please

refer to the explanation shown above with regard to Claim 12. It is interpreted that

Smyth et al. as modified by Medvinsky will substitute the diagnostic agent in response

to a determination that the diagnostic agent is not function, in the same spirit Smyth et

al. substitutes a non-function communication channel and a non-functional DVM.

16. As for **Claim 14**, Smyth et al. teach the communication link is broadband

connection. See Smyth et al. col. 4 lines 53-58 "Although the cable transport network is

illustratively described as a hybrid fiber-coax network, other network forms may be used

such as all fiber, all coax, or **any other broadband communications network that will**

support three unidirectional communications paths."

17. As for **Claim 15**, neither Smyth et al. nor Medvinsky expressly teach the

communication link is an asymmetric digital subscriber line. However, Official Notice

(MPEP § 2144.03) is taken that both the concepts and advantages of using ADSL line

are well known and expected in the art. At the time the invention was made, it would

have been obvious to one with ordinary skill in the art to modify Smyth et al. and

Medvinsky by having the communication link be ADSL. One of ordinary skill in the art at

the time the invention was made would have been motivated to use ADSL in order to

provide a high data rate internet connection to the customer's premise using existing

phone lines.

18. As for **Claim 16**, the modified Smyth et al. in view of Medvinsky teaches the

communication link is a satellite connection. See Medvinsky col. 3 lines 24-27 "Other

embodiments could distribute the content with **satellite dishes**, microwave antennas,

RF transmitters, packet switched networks, cellular data modems, carrier current, or

phone lines."

19. As for **Claim 17**, Smyth et al. teach the diagnostic service center is further operative to remedy the performance problem. See col. 12 lines 12-14 "Referring now to FIG. 4, a first embodiment of the method for detecting a defective channel and correcting the defective channel is shown."

20. As for **Claim 18**, the modified Smyth et al. in view of Medvinsky teaches the diagnostic service center is further operative to remedy the performance problem by uploading a replacement program module to a system memory of the media distribution device. Please refer to the explanation given with reference to Claims 12 and 13. It is interpreted that the modified Smyth et al. in view of Medvinsky will remedy a performance problem by uploading a replacement program module to a system memory of the media distribution device.

21. As for **Claim 19**, Smyth et al. teach the diagnostic service center is further operative to remedy the performance problem by establishing a secondary communication link between the media distribution device and the media delivery service provider. (See Smyth et al. col. 10 lines 10-15 "Once the defective channel module 312 determines that a channel is defective, the defective channel module 312 signals the channel re-allocation module 314 so that the data streams being transmitted over the defective channel can be re-assigned to other channels communicating with the same node 156.").

22. As for **Claim 20**, Smyth et al. teach a self-diagnosing media distribution system, comprising:

a media delivery service provider operative to transmit a media content stream to a media distribution device (see Smyth et al. fig. 1 unit 114 Headend Equipment, col. 4 lines 23-30 "In addition to the information that can be interactively manipulated, the system 100 provides for communication of conventional cable television signals (analog signals) to the STBs 116. Specifically, a conventional cable signal source (not shown) is part of a conventional cable head end 114. As such, the conventional cable signals propagate to the STBs 116 to supplement the interactive information provided by the service provider.");

a diagnostic service center for communicating with the media distribution device to retrieve diagnostic data from the media distribution device and to send remedial data to the media distribution device (see col. 2 lines 25-34 "The session control manager is coupled to receive signals from the plurality of set top boxes, and coupled to control the digital video modulators and the assignment of communication channels to nodes. The defective channel detection module receives signals from the plurality of set top boxes, and based on the error rate and other factors determines if any of the communication channels used by the digital video modulators are defective.");

Smyth et al. do not expressly teach an intelligent diagnostic agent residing in the media distribution device and operative to collect diagnostic data associated with the media distribution device and to transmit the diagnostic data to the diagnostic service

center. However, in the same field of endeavor, Medvinsky teaches a system to verify the integrality of a software residing in set-top-box by using a validation routine that resides in set-top boxes (see Medvinsky col. 2 lines 46-55 "The present invention validates information, such as software, has not been modified within a television set top box. In one embodiment, a message is periodically sent to the set top box that purposefully contains errors. A validation routine in the set top box should report those errors back to a cable television (TV) provider. However, the validation routine may not report these errors if it has been modified or replaced by hackers, for example. Accordingly, the cable TV provider can determine if the security routine is no longer functional by noting the absence of an error report."). In light of the teaching of Medvinsky, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teaching of Smyth et al. to have an intelligent diagnostic agent residing in a media distribution device (wherein the set-top-box is interpreted to be a media distribution device) operative to collect diagnostic data associated with the media distribution device. One of ordinary skill in the art at the time the invention was made would have been motivated to do this in order to verify and validate the system integrity of a set-top-box that may have been tampered with by hackers;

whereby a performance problem associated with the media delivery device can be remotely remedied. Smyth et al. teach a system wherein the communication network and the digital video modulators are diagnosed to be functional or not, and when found to be non-functional, an alternate communication channel or a spare DVM is used. (see

Smyth et al. col. 12 lines 12-34 "Referring now to FIG. 4, a first embodiment of the

method for detecting a defective channel and correcting the defective channel is shown.

. . Next in step 406, the session control manager 200 determines the particular DVM

that is servicing the channel identified to be defective . . . If so the process continues in

step 410 by re-assigning the data streams to use another channel or another DVM

112."). It is interpreted that in the modified Smyth et al. in view of Medvinsky teaching,

the diagnostic center will be able to check if the diagnostic agent that is uploaded to the

set-top-box is function or not and if found that the diagnostic agent by itself is not

function, an alternate diagnostic agent will be uploaded to the set-top-box. This is

interpreted to be remotely remedying a problem associated with the set-top-box (media

delivery device)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 103(a) as being anticipated by Medvinsky

(U.S. Patent 6,754,908).

23. As for **Claim 25**, Medvinsky teaches an intelligent diagnostic agent residing in a

media distribution device within a self-diagnosing media distribution system (see col. 2

lines 46-55 "The present invention validates information, such as software, has not been

modified within a television set top box. In one embodiment, a message is periodically

sent to the set top box that purposefully contains errors. A validation routine in the set

top box should report those errors back to a cable television (TV) provider. However,

the validation routine may not report these errors if it has been modified or replaced by

hackers, for example. Accordingly, the cable TV provider can determine if the security

routine is no longer functional by noting the absence of an error report." The entire

media distribution system including the set-top-box and the headend is interpreted to be

a self-diagnosing system), the intelligent diagnostic agent operative to:

collect diagnostic data associated with the media distribution device (See col. 2

lines 49-51 "A validation routine in the set top box should report those errors back to a

cable television (TV) provider"); and

transmit the diagnostic data to a diagnostic service center (See col. 2 lines 49-51

"A validation routine in the set top box should report those errors back to a cable

television (TV) provider"),

wherein the diagnostic service center is operative to communicate with the

intelligent diagnostic agent over a communication link to retrieve the diagnostic data, to

determine a performance problem associated with the media delivery device (see col. 2

lines 48-55 "In one embodiment, a message is periodically sent to the set top box that

purposefully contains errors. A validation routine in the set top box should report those

errors back to a cable television (TV) provider. However, the validation routine may not

report these errors if it has been modified or replaced by hackers, for example.

Accordingly, the cable TV provider can determine if the security routine is no longer

functional by noting the absence of an error report."), and to send remedial data to the

media distribution device. Medvinsky does not expressly teach to send remedial data to

the media distribution device when it is determined that the intelligent diagnostic agent

is malfunctioning. Medvinsky does however teach that the cause of the malfunction of

the diagnostic agent could be "viruses or other problems". See col. 8 lines 9-12 "If the

authentication and authorization checks are disabled by a pirate, virus or other

problems, the security module 240 reports no error to the headend 104 in step 628.

After no error is received by the headend 104 in step 632, an exception condition is

recorded by the content provider." However, Official Notice (MPEP § 2144.03) is taken

that both the concepts and advantages of sending a remedial data ("a fix" or a "patch"

as in commonly known in the art) are well known and expected in the art. At the time

the invention was made, it would have been obvious to one with ordinary skill in the art

to modify Medvinsky by sending a remedial data to the media distribution device in the

event it was detected that a virus has corrupted the self-diagnosing agent. One of

ordinary skill in the art would have been motivated to do this in order to fix the problem

quickly and remotely when it is reasonably known that the problem with the media

distribution device is not an intentional effort of a pirate of hacker but rather a virus that

is not intentionally planted by the user of the set-top-box.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yun (U.S. Patent # 6915531) teaches a system and method of diagnosing an open cable set-top box by using intelligent diagnostic agents.

- Cohen (U.S. Patent # 6295615) teaches a method to automatically restore communication channels by determining if a communication channel is functional or not functional.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirubel Aklilu whose telephone number is 571-272-7342. The examiner can normally be reached on 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelly can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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7/22/05

VIVEK SRIVASTAVA
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